

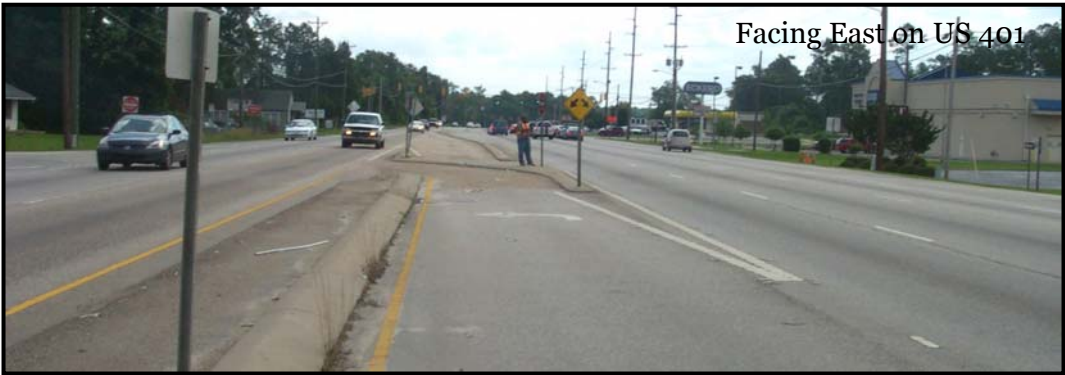
Results

Crash Reductions (Using 7 Year Before and After Periods)		
Total Crashes:	83.9% Reduction	(From 56 crashes to 9 crashes)
Target Crashes*:	87.2% Reduction	(From 39 crashes to 5 crashes)
Target Injury Crashes:	85.7% Reduction	(From 21 crashes to 3 crashes)
Target PDO Crashes:	88.9% Reduction	(From 18 crashes to 2 crashes)
AADT:	12.2% Increase	(From 31,200 vehicles to 35,000 vehicles)

* Target Crashes include all Frontal Impact Crashes.
The Frontal Impact Crash types considered are as follows: Left Turn-Same Roadway, Left Turn-Different Roadways, Right Turn-Same Roadway, Right Turn-Different Roadways, Head On, and Angle.

The Treatment Location appears to have had a substantial decrease in both Total and Target Crashes from the before to the after period. The safety treatments appear to have dramatically reduced the number of frontal impact crashes and the injuries associated with the potentially high severity crash types. In addition, it appears that the redirection of side street traffic at the treatment intersection has had minimal impact on the number of crashes at the surrounding intersections.

Location Photos Taken on June 13, 2005



For the complete project evaluation report and reports on other projects, please go to:
<http://www.ncdot.org/doh/preconstruct/traffic/Safety/ses/projects/completed.html>

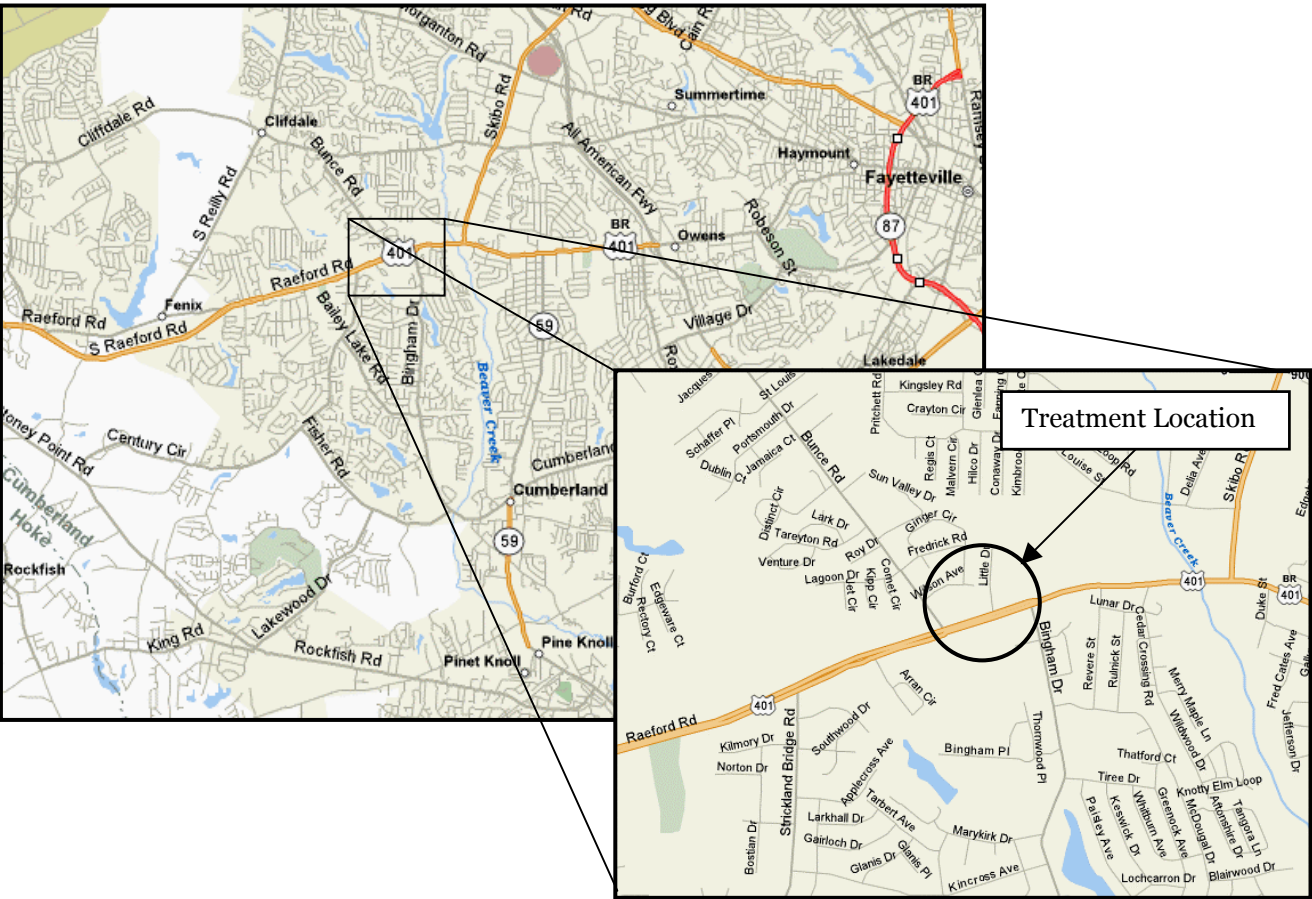
North Carolina Department of Transportation
Traffic Engineering and Safety Systems Branch
Traffic Safety Systems Management Section
Safety Evaluation Group

Evaluation of Spot Safety Project # 06-95-201

The Directional Crossover Installation at the Intersection of US 401 and
SR 1546 (Little Drive) / Falcon Village Shopping Center
In Cumberland County

The subject intersection is located in Fayetteville. The median crossover serves as an entrance to Falcon Village Shopping Center and an apartment complex. Traffic Engineering staff originally recognized this location as needing safety improvements because it had experienced 60 Total Crashes in the three year time period between December 1, 1991 through November 30, 1994. These crashes resulted in one fatality, seven class B injuries, and 37 class C injuries.

The raised islands were constructed in the crossover to prevent through and left turn movements from the side street approaches. Vehicles entering the intersection from SR 1546 (Little Drive) and Falcon Village Shopping Center were having difficulty making safe movements due to the heavy traffic volumes on US 401 and insufficient gaps in traffic. US 401 was also widened within the vicinity of the subject intersection in order to provide additional travel lanes and increase capacity. The project was completed on March 31, 1997 at an estimated cost of \$75,000.

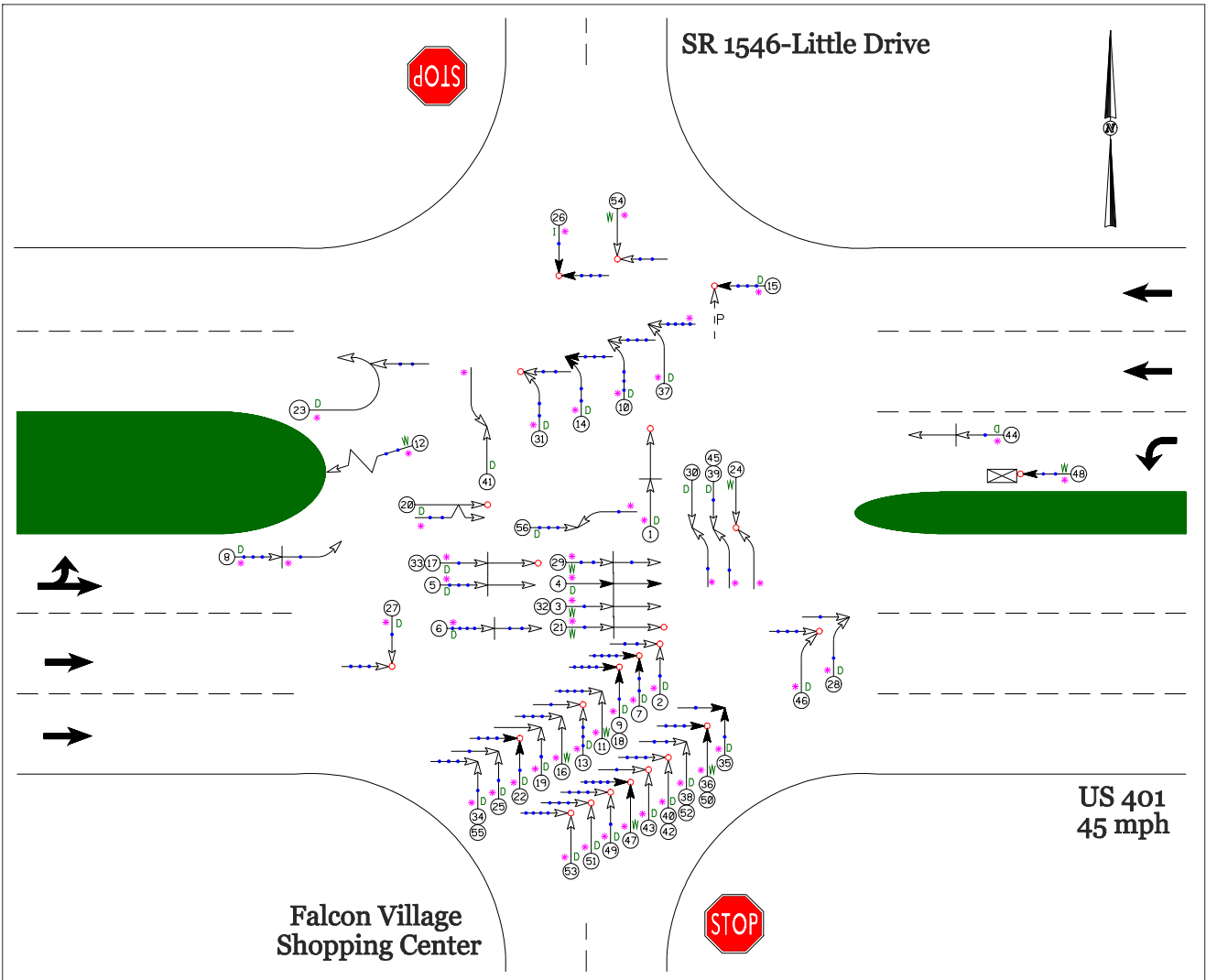


Before Period Collision Diagram

January 1, 1990 through December 31, 1996

(7 Years of Crash Data)

1993 ADT = 31,200



- 56 Total Crashes
- 27 Angle Crashes
- 4 Left Turn-Different Roadway Crashes
- 6 Left Turn-Same Roadway Crashes
- 2 Right Turn Crashes
- 13 Rear End Crashes
- 1 Sideswipe Crash
- 1 Run Off Road Crash
- 1 Parked Motor Vehicle Crash
- 1 Pedestrian Crash

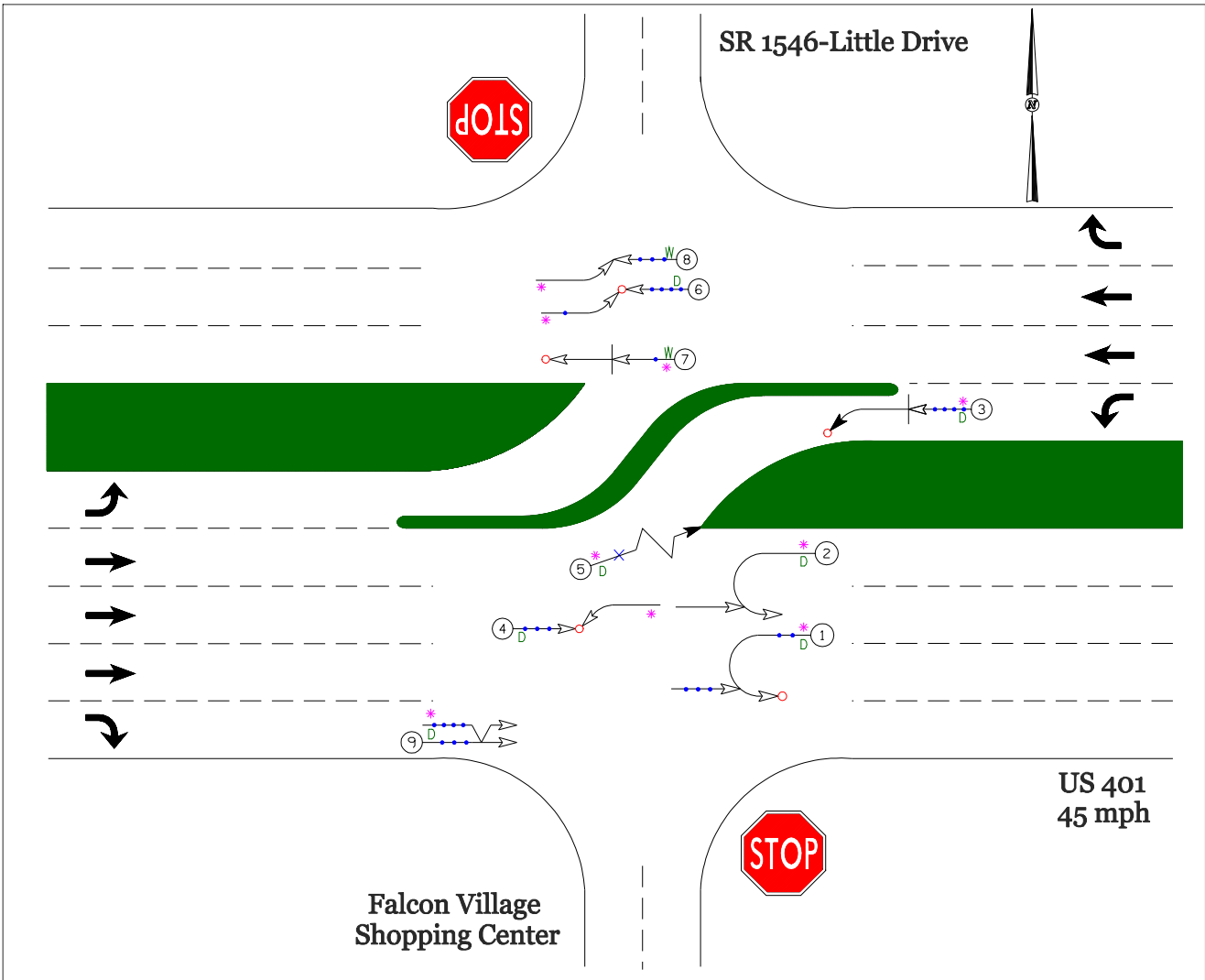
- 39 Target Crashes*
- 21 Target Injury Crashes
- 18 Target PDO Crashes

After Period Collision Diagram

July 1, 1997 through June 30, 2004

(7 Years of Crash Data)

2000 ADT = 35,000



- 9 Total Crashes
- 5 Left Turn-Same Roadway Crashes
- 1 Sideswipe Crash
- 2 Rear End Crashes
- 1 Fixed Object Crash

- 5 Target Crashes*
- 3 Target Injury Crashes
- 2 Target PDO Crashes

* Target Crashes are deemed correctable by the treatment.
For this evaluation, Target Crashes include all Frontal Impact Crashes such as:
Left Turn-Same Roadway, Left Turn-Different Roadways, Right Turn-Same Roadway,
Right Turn-Different Roadways, Head On, and Angle